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Fourth-Wave HCI Meets the 21st Century Manifesto

Creative Subversion in the 'CHI-verse'

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ABSTRACT

We take up Bødker's [9] challenge to 'identify' a fourth wave HCI, building on the work of Blevis et al. [8] and others to shore up a new vision that places 'politics and values and ethics' at the forefront without abandoning the strengths of previous waves. We insist that a fourth wave must push harder, beyond measured criticism for actual (e.g. institutional) change. We present two studies performed at CHI'19, where we used our MANIFESTO! game to: 1) take the temperature of colleagues on adopting an activist stance, 2) test manifesto writing as a key activity in pushing HCI forward into the fourth wave, and 3) test our game for subsequent iterations, and as a probe for inspiring new digital tools. With the enthusiastic response received to gameplay, facilitated in part through a novel method using tableau vivant, we argue for taking political activism from the margins into mainstream HCI.

CCS CONCEPTS

• Human-centred computing • Human-computer interaction (HCI) • HCI theory, concepts and models

KEYWORDS

Manifestos, Fourth-Wave HCI, Games, Tableau Vivant, Activism, Creative Subversion

1 First Things First

Using a context sensitive and largely ethnographic approach to research, HCI's third wave has challenged an understanding of technology that is constrained by the earlier disciplinary canons of 'efficiency' [9]. Bødker, when asked about the potential of a fourth wave, responded: 'HCI is in the middle of a chaos of multiplicity in terms of technologies, use situations, methods, and concepts. Hopefully something lies beyond that horizon, but for now, I'll leave it to others to identify' [9]. In this paper, in line with other recent discussions [8], we take up the challenge of envisioning this next wave, seeking to demonstrate how a fourth-wave HCI/IxD - 'distinguished ... by its primary focus on politics and values and ethics' - is a necessary designation. While previous waves have remained 'value-neutral', a fourth-wave poses a means of 'avoid[ing] the centrality of teleological, positivist notions of interaction design', and emphasises 'that being thoughtful about what to make and the implications of making are central concerns' [8]. We would agree but go further still, insisting that a fourth wave must push harder for actual (e.g. institutional) change - it must go beyond measured criticism and a shift in 'focus' to embrace activism at all levels, from

questioning corporate sponsorship, to increasing true accessibility and diversity, and addressing urgent existential threats such as climate change.

To this end, we will support our discussion with a presentation of an event that was organised as part of this year's CHI conference, in which we used the manifesto as a thought probe facilitated through the modality of a card game. We wanted to use our game MANIFESTO! to engage CHI attendees around the issues affecting all of us within the discipline and the world we live in, in order to: 1) take the temperature of our colleagues in the field on adopting a more activist stance, 2) test our notion of manifesto writing as a key activity in pushing HCI forward into the fourth wave, and 3) test our game for subsequent analogue iterations, and as a design probe for inspiring new digital authoring and learning environments. While we believe that the manifesto is an important tool in shaping ideas and articulating goals and principles, the short manifestos produced using our game at CHI were not intended to be viewed as finished texts – which is why they have not been published. Rather, the activity of manifesto writing was intended to ignite conversations and introduce the idea of increasing political activism in HCI. That said, the kinds of rough manifestos produced in this experimental session could be further workshopped and honed with more time - another hour, another day, another week - and published in finished form. Or for example extracts of the manifestos could be gathered together and fed into some larger HCI manifesto using a voting system to select the best tenets. Our session did not allow for this level of production, it rather hinted at possibilities and experimented with both ideas and forms - including more radical forms (e.g. manifestos as tableaux vivants and manifestos as algorithms or diagrams). In this sense it was a probe, and insofar as it was a success, with many of our colleagues saying that they would use the game in their own classrooms, we believe it paves the way for both deeper future engagement with manifesto writing as a practice in our discipline and taking political activism from the margins into the mainstream of HCI.

We agree with Bødker that we must not dispense wholly with the notions of second- (or third-) wave HCI; we must 'strike the balance differently between individual experience (third wave), on the one hand, and sharing, learning from each other within communities of practice, and participation in shared development and appropriation of technology (second wave)' [9]. We see the benefit of taking certain elements of the second wave, with its emphasis on systems and ecologies and the common, and the third wave, with its critical perspective, into the fourth wave - towards pressing issues such as tackling the climate emergency and growing inequality (e.g. [13]) through large-scale, values-driven systemic changes to the way we live.

2 Until Now

2.1 HCI Needs the Manifesto

In 'Never mind the bollocks, i wanna be anarCHI: a manifesto for punk HCI', [33] present 'two fingers to the HCI establishment'. In the spirit of 'punk HCI', their contribution unleashes the use of an unusual format, at least in the context of HCI. Although it is ring-fenced inside CHI's designated progressive section, alt.chi, this contribution, alongside other HCI and interaction design contributions [22, 35, 45, 20, 27, 1, 21, 39, 6, 24], uses the manifesto as a way of provoking a discussion around complex issues. In many of these manifestos one witnesses attempts by HCI researchers to perform a series of (often overlapping) moves: to speak collectively, build consensus, raise awareness, advocate for and accelerate change, speak for and from the margins, disrupt the status quo, unsettle stuck discourse, sidestep conventional modes, expose broken promises, and 'circumvent ordinary ... avenues' of redress if they are too slow in responding to urgent demands for change [34].

Although manifestos do not necessarily entail an activist stance, the topic dovetails nicely into HCI work that attempts to tackle complex social and political design contexts. To this end, one can witness a growing desire within the field to address non-traditional contexts of performance and usability. For example, recent workshops have problematised the 'use of design research and computing practice in resisting and reifying inequalities' [18], while others have documented the rise of specific areas of activism within HCI such as health [47] and sustainability [42]. The field has also witnessed the rise of grassroots campaigning [46], as

well as participatory action research through advocacy organisations [4]. Others take a more analytical stance by examining the role that digital technologies might play in the rise of social and political movements [5, 49]. Such contributions to the field resonate with [30] and their suggestion that ‘HCI is much broader than the study of interface design and input devices. It includes considerations of the social, political, ethical, and societal implications of computer systems’. Or, perhaps - and by inspecting the mechanisms of computation more closely - these contributions reflect what [23] describes as the ‘social, cultural, and political role algorithms play’.

As Bruno Latour notes in ‘An Attempt at a “Compositionist Manifesto”’, despite a fall from fashion of old notions of the ‘*inevitable* and *irreversible*’ flow of time that once governed the manifesto - the ‘modernist grand narrative of Progress’ - the form might still be rehabilitated: ‘Not as a war cry for an avant-garde to move even further and faster ahead, but rather as a warning, a call to attention, so as to stop going further in the same way as before toward the future’ [32]. In Latour’s approach lies the true potential of the 21st century manifesto - not a *war cry* but a *warning*, a wakeup call, signalling that it is not (yet) too late to change direction, away from blind and ‘inevitable’ technological progress and towards a more harmonious, ecological, and inclusive future. Similarly, Ito’s notion of a ‘seed essay’ expressed in ‘Resisting Reduction: A Manifesto’, which puts forth the idea that 21st century manifestos can be not only constructive but also iterative and collaborative in ways that were not possible in the pre-digital era, was also a source of inspiration for our project [31].

2.2 Manifestos and the Words in Freedom Project

At its most basic, a manifesto is a ‘public declaration ... issued by a group or an individual’ declaring ‘aims and principles’ [29]. In this paper ‘manifesto’ refers broadly to the revolutionary model made famous by Marx and Engels’ *The Communist Manifesto* [37] and the social and artistic manifestos that followed, as well as the recent post-revolutionary variations mentioned above (e.g. [32, 31]). As Lyon argues, it is essentially a ‘tool for change’; one that by ‘defining and enacting the identities of radical groups, individuals, and parties ... has galvanized revolutionary movements’ for centuries [34]. With the cultural and political upheavals of the nineteenth century, the manifesto became ‘the mode of agonism, the voice of those who are contra’ [40]. In the digital world revolutionary manifestos have been present since the earliest declarations by hackers, cyberfeminists, and techno-utopians. [25]. Many digital manifestos have been gathered into online repositories such as the Digital Manifesto Archive,¹ Aaaarg,² and 391.³

Building on the latest ‘manifesto moment’ [14] heralded by the current era of online (and IRL) activism, the Words in Freedom (WiF) project⁴ analyses innovations in form, content, and dissemination signalled by the digital manifesto (and its analogue predecessor), maps what has been done in recent years, and expands the capacity for future interventions in the form of both digital and analogue tools for authoring manifestos, including a ‘Manifesto Machine’, a ‘Moving Type Machine’, and the MANIFESTO! card game. While we are designing tools for making manifestos, our purpose extends beyond simple technical facilitation and the fulfilment of what Dunne and Raby call ‘design’s inbuilt optimism’ [17]. We want to encourage users to reflect critically – through collaboration, conscious expression, and public debate – on what they stand for and why, and how their beliefs might intersect with the beliefs of others. We also want to facilitate the creative dissemination of these views in manifesto form to promote critical thinking and positive change in wider contexts. We also hope to invite reflection on the productive and potentially undervalued role of criticality in HCI, in effect fusing two sub-disciplines: Design for Good [2] and Critical Design [16]. As Tonkinwise has argued (in a manifesto): ‘Designing that does not already Future, Fiction, Speculate, Criticize, Provoke, Discourse, Interrogate, Probe, [and] Play, is inadequate designing.’ [48]. Using the manifesto, we aim to do as many of these things as possible - to open up discursive spaces to benefit institutions, communities, and organisations of all kinds.

¹ <https://www.digitalmanifesto.net>

² <https://aaaaarg.fail/collection/51c592356c3a0ede0bcd2000>

³ <https://391.org/manifestos/>

⁴ <https://www.wordsinfreedomproject.org>

2.3 Games for Political Change

Games, like all artifice, function as a kind of propaganda. They reproduce a world view, and normalise it within the confines of the game. Chess offers no winning condition other than defeat of an enemy through violence, accepting hierarchy and class as not only necessary but positive, with the monarchy forming the strategic centre. Some of the most popular children's games solidify conservative and reactionary world views, such as *The Game of Life*, which (aside from being uncritically heteronormative) declares the winner to be the person who has the most money before they die. Golf similarly enshrines class privilege through the relationship of caddy and player, and costly membership fees for use of privately owned land (the development of which often displaces local communities and destroys ecology). Under a banner of innocent escapism, games, like all designed objects, tend to reproduce the social relations and ideology of the society in which they were created.

Can we create games that give players new frameworks in which to think, challenge entrenched ideas, and support meaningful social critique? The popular board game *Monopoly* was originally designed by Elizabeth J. Magie as a learning tool to critique landlordism and argue for progressive taxation, and that all land should be part of a common treasury [41]. Guy Debord's *La Jue De La Guerre*, in which 'the two opponents can be considered as contesting interpretations of the topology of physical space under spectacular capitalism', not only contains a critique of our society but offers itself as a training tool for the means of changing it [7].

There have been many attempts to directly leverage games, and the increased engagement offered by so-called 'gamification', to modify behaviour. In 2007, *World Without Oil* subjected 1700 players to a fictional oil-scarce world that included simulated news about an oil crisis. In the three years that followed, it was reported that most players kept up the fuel saving habits they had learned in gameplay [38]. *Evoke*, a game deployed by the World Bank in over-exploited economies, asks players to solve major natural catastrophes and epidemics, largely using profit and market-driven solutions [50]. Games like *The Day We Left* act to raise awareness. During the height of the Syrian war, this game placed players within a Syrian family trying to escape the war zone. Its aim was to act as a counternarrative to stories promoted by privately owned media corporations that Syrian refugees in the West were part of an undercover invasion by Islamic State [52].

Manifestos are like games in that they structure reality. But the manifesto structures the reality surrounding it, or attempts to, whereas the game creates a separate reality that can sit beside our own without ever interacting with it. Games, by their very nature, leave a wake of silence; whereas a manifesto ideally lays down a direction towards actual change. What we have done is to create a closed system in which the larger system can be safely smashed, but also questioned and reimaged. The outcome of the game is a manifesto. Players are allowed to act as revolutionaries, but also encouraged to create lines of reasoning and critique that can extend outwards, beyond the limits of the game, to address and unsettle real-world systems and institutions.

3 MANIFESTO! The Game

MANIFESTO! is a card game (Figure 1) for stimulating and supporting manifesto authoring. It stands alone as an analogue resource (e.g. for the classroom, organisational summits, etc.), as well as functioning as a design probe for expanding the WiF toolkit. The current iteration (also known as the 'Tech Edition') was developed in 2019 as part of the WiF project. It was first deployed at CHI the same year. Given the setting, already rich in digital tools, we viewed CHI as an opportunity to set ourselves apart by engaging people through analogue and physical interactions.



Figure 1: MANIFESTO! (Tech Edition).

Table 1: MANIFESTO! Tech Edition cards.

Orientation (10)	Tone (10)	Opening (10)
A/B List	Angry	Come, Comrades
Algorithm	Excited	Imagine
Challenge	Funny	In the future
Declaration	Hopeful	In the past
Diagram	Measured	Let us
Principles	Outraged	Until now
Rant	Playful	We are
Rules	Radical	We believe
Statement	Righteous	We declare
Vision	Urgent	We must

Provocation (23)	
Abandon the myth of universalism	Feminist everything
Abolish institutional hegemony	Fight fascism full-time
Arm endangered species	Garbage in, garbage out
Ask why	Increase access
Better for whom?	Needs before desires
Challenge inequality	Queer your tech
Climate change changes everything	Researchers are not bystanders
Cultivate generosity, hospitality & trust	Take industry to task
Design tools & interactions people need	There is not an app for that
Diversify AI	We are in this together
Don't colonise the future	*WILD
F*** paywalls, open research!	

The simple rules are as follows: it is a game for individuals or groups of 2-6 players. In each round, player(s) are dealt one random card from each of four categories: Provocation, Orientation, Opening, and Tone (Table 1). One card substitution is allowed per round. The categories each define a different parameter or constraint of the overall objective. Provocation suggests a broad topic or theme (e.g. ‘Better for whom?’, ‘Challenge inequality’); Orientation designates the type of manifesto players will create (e.g. ‘Diagram’, ‘Declaration’); Opening offers the initial phrase (e.g. ‘We declare’, ‘Imagine’); and Tone is the rhetorical register to be used in addressing the subject or audience (e.g. ‘Urgent’, ‘Hopeful’). Players use their four constraints as a prompt to write or draw their manifesto individually or collectively. Each round can be timed (for example 10 minutes) or open-ended. When a round is complete players may vote for the

‘winner’ - the most persuasive manifesto - and are encouraged to disseminate the resulting text either publicly via social media or privately among friends or colleagues as a means of continuing the discussion.

The basic concept of MANIFESTO! was inspired in part by Stuart Candy and Jeff Watson’s design fiction game *The Thing From The Future* [12], which was made to be ‘hacked and customised’ and itself drew on Dator’s framework of ‘four generic alternative futures’ [15]. Like *The Thing From The Future*, MANIFESTO! is distributed under a Creative Commons (BY-NC-SA) licence. Beyond the similar prompt-based game structure, there are significant differences between MANIFESTO! and *The Thing From The Future* (TTFTF). While TTFTF encourages players to create an everyday object (e.g. a t-shirt) that tells a story about a possible future, MANIFESTO! seeks to focus players on thinking about real possibilities for change in the present (e.g. practical alterations to the way a conference such as CHI is run). MANIFESTO! uses roughly half as many cards (53 instead of 108), includes a modified game sheet with combined text/image authoring space and room to place actual cards, and has colour-coding on card backs to indicate the four categories, which are also different: our own Orientation, Opening, Provocation and Tone substituted for TTFTF’s Arc, Terrain, Object and Mood. In designing MANIFESTO! we also tried to allow for productive friction between the four cards of a given hand - creative dissonance or even ‘dissensus’ [44] - inspired by the anarchic and chance-driven processes of 20th century avant-garde movements such as Dada, Surrealism, and Fluxus.

4 Making Manifest at CHI'19

We staged two interventions at CHI'19 in Glasgow, Scotland for the purpose of testing our card game and engaging conference attendees around attitudes towards activism in HCI. For our initial intervention, we inhabited a vacant booth in the demonstrations hall and encouraged individual passersby to stop and share their reactions to a set of randomly drawn cards by composing a short manifesto. For our structured intervention, we initiated the session by modelling a manifesto of our own with the help of a megaphone for dramatic effect. We then introduced the card game and organised participants into small groups. In this event, we encouraged participant groups to warm up with a tableau vivant (Figure 4) before composing their paper-based manifesto. Both types of interaction were aided by the use of a sample completed MANIFESTO! gamesheet (Figure 5), which participants could access freely. After composing manifestos of their own, participants from both the guerrilla and structured events completed a short survey (Section 4.3). Participants completed an informed consent form, which was approved by the institutional review board of Madeira ITI, and were given a free deck of MANIFESTO! cards to take home. We describe each of these interventions more fully in the following sections.

4.1 Guerrilla CHI

The guerrilla CHI event enabled us to pre-test the card game while focusing on individual manifesto authoring. We sought to capture the attention of conference-goers by wearing eye-catching hats and t-shirts that said ‘Ask me about MANIFESTO!’, while one of us walked around with an usherette tray full of card decks. In total, we tested the game with 14 CHI attendees, with an equal representation of female and male participants.

As indicated above, participation occurred freely and began with a brief introduction to the game. Participants were then dealt a random hand of cards - e.g. ‘There is not an app for that’ (Provocation), ‘Principles’ (Orientation), ‘Come, Comrades’ (Opening), and ‘Outraged’ (Tone) - and were instructed to use the cards as a prompt for writing and/or drawing a short manifesto on the gamesheet provided (Figure 2). Participants were able to sit or stand and could spend as long as they liked composing their manifesto. The shortest composition time was approximately five minutes and the longest was approximately 20 minutes. As a way of exploring possible new approaches to gameplay, participants were told that they were free to break the rules of the game if they desired. Just over half of the participants completed the follow-up survey (Table 2), which was an attempt to gauge their response to manifesto authoring and to further explore attitudes and beliefs around politics and the HCI discipline / CHI community.



Figure 2: Individually authored manifesto and corresponding game cards.

In terms of promoting our structured CHI session, generating enthusiasm for the game, and supporting reflection and discussion, the guerrilla event exceeded our expectations. This could in part be attributed to the ‘honeypot effect’, where passersby gather around an installation as a result of others interacting with it [11]. There was also an element of theatricality at play in keeping with manifesto style [43], whereby we drew attention to our unusual experiment with loud voices, costumes, and dramatic gestures. In most cases participants self-selected, freely approaching our makeshift booth and showing enthusiasm for the game; however, some others were approached by us at random and required more coaxing. Of the former group, these participants generally arrived with a desire to speak out about issues that concern them, and several conveyed gratitude for the opportunity to express themselves. One participant described the experience as ‘therapeutic’. The latter group seemed to have more difficulty getting started and finding their ‘manifesto voice’, yet all participants replied positively that they would do it again when asked about the experience on the exit survey. Overall, participants required only minimal guidance with respect to gameplay, and succeeded in composing original and thoughtful manifestos (in effect, extended provocations) based on the prompts they were given. In a few cases participants asked to change cards, particularly the Provocation card, which was granted.

4.2 Structured CHI Intervention

The 80-minute structured session at CHI was comprised of two separate manifesto writing exercises, and concluded with performances by participant groups for the sharing of results and processes. After modelling our manifesto [24] and explaining the basic rules of gameplay, along with rough guidelines for each activity (e.g. Figure 3), we divided the audience into random groups. There were 32 participants in total (18 female, 14 male); they formed seven groups with four to six participants each. The groups were asked to spread out: four groups made use of a nearby corridor, and three stayed in the meeting room. The purpose of this instruction was to give everyone sufficient space and freedom to plan and discuss their manifestos, as well as to introduce an atmosphere of lightly transgressive rule-breaking to the process - again in keeping with the nature of revolutionary and avant-garde manifestos. Groups were instructed to spend approximately 10 minutes on the tableau vivant and 15 minutes on the written or drawn manifesto.

4.2.1 Tableau vivant

According to Lyon, manifestos represent ‘bodies in struggle rather than simply ideas in contention’ [34]. To reflect this physical aspect of the manifesto as manifestation, the first exercise in collective manifesto authoring in the structured session took the form of tableau vivant, a parlour game popularised in the Victorian era in which live actors create a ‘living picture’. We drew inspiration for using tableau vivant as a

tool in this context from the Brussels-based arts laboratory FoAM, who use tableau vivant as part of their ‘futuring process’ in working with diverse groups to imagine and bring to life possible futures while embracing ‘collective spontaneity’ [19]. FoAM uses tableau vivant primarily as a warm-up exercise in their process, and this was also part of our intent: it was a morning session, and we felt participants would benefit from a kinaesthetic icebreaker and group bonding exercise. Moreover, we also wanted to explore tableau vivant as a physical variation distinct from more conventional paper-based manifesto authoring.

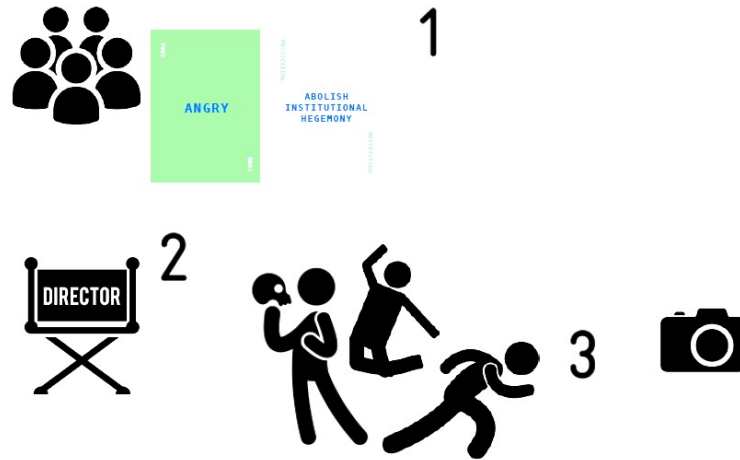


Figure 3: Tableau vivant instructions presented during group interactions.

Once situated, each group nominated a ‘director’ who worked with the ‘actors’ to organise a tableau vivant around a two-card prompt (one ‘Provocation’ and one ‘Tone’ card). They had 10 minutes to complete the assignment. For example, one of the groups that remained in the meeting room used the cards ‘Increase access’ and ‘Radical’ to create their tableau vivant (Figure 4, top left). As a prop this group used chairs, which had to first be disassembled, to create a ‘barricade’. Other groups composed their tableaux by standing on chairs or sofas, lying on the floor, or making symbolic use of a doorway. Participants used elaborate gestures, including facial expressions, and showed a high level of commitment to this activity. One participant described her group’s tableau vivant (bottom-left) as follows: ‘The tableau represents (from left) the designer, the user, the manifesto writer, the critic, and the environment. We had to write a “radical” manifesto [i.e. Tone] so we decided to bring down the icon of the user.’

4.2.2 Group manifesto authoring

After the tableau vivant, the groups chose a scribe and used the MANIFESTO! gamesheet and a full hand of four cards to create paper-based compositions. As with the individually authored manifestos created during the guerrilla session, the group manifestos were successful in terms of engaging with important issues, using diverse rhetorical and visual styles, and exhibiting many typical manifesto features and tropes, e.g. list of tenets, use of irony (Figure 6), elevated tone, and so on. Unlike the individual exercise (which was untimed), groups had the added task of harmonising different viewpoints and reaching consensus. As a result, group manifestos tended to be shorter if no less interesting. As one group pointed out in their survey, the manifesto is ideally suited to group work, as it offers ‘a good mental exercise for generating creative thought and distilling opinions’. However, not all groups reached consensus: when contemplating the Provocation card ‘Feminist everything’, one group decided to split in half, producing two different paper-based manifestos using the same cards. While some groups complained in their surveys about the limited timeframe, all managed to produce a manifesto by the end of 15 minutes.



Figure 4: Tableaux vivants using the Tone and Provocation cards from MANIFESTO! Counter-clockwise from top-left, the respective cards enacted were: 'Increase access' and 'Radical'; 'Challenge inequality' and 'Outraged'; 'We're in this together' and 'Angry'; 'Better for whom' and 'Radical'. Images have been rendered as line drawings to protect participant identities.

4.2.3 Performance

During the final 10 minutes of the structured CHI interaction, all groups reassembled in the meeting room. They took turns coming to the front of the room to describe their prompt cards and perform their tableau vivant and/or read out their paper-based manifesto with the megaphone in front of livestream cameras. Some of the groups also described their process for working as a team (e.g. reaching consensus) and interpreting the prompt cards in the form of both a 'bodied interaction' and a written manifesto. One of the most surprising aspects of the performance component was the lack of shyness. Groups quickly and eagerly volunteered to present their results and did so with dramatic flair in all cases. This could be attributed to successful group bonding during the tableau vivant, as well as the power of the manifesto to act as a 'mask' that permits uncharacteristic and unconventional behaviour (a topic we explore further in the Discussion).

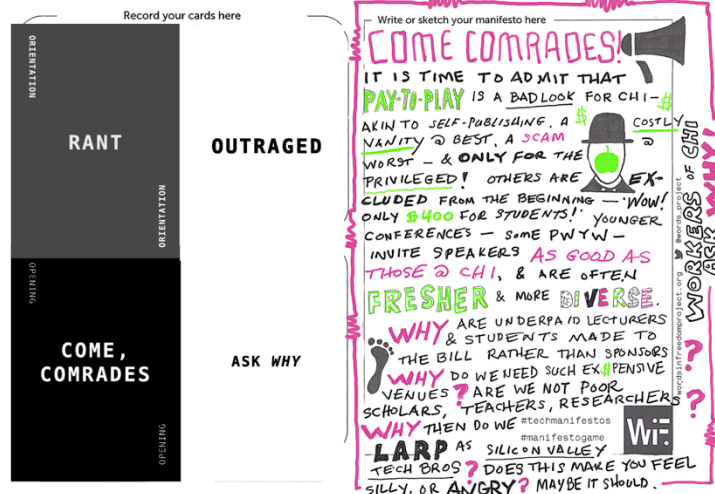


Figure 5: Sample completed MANIFESTO! gamesheet.

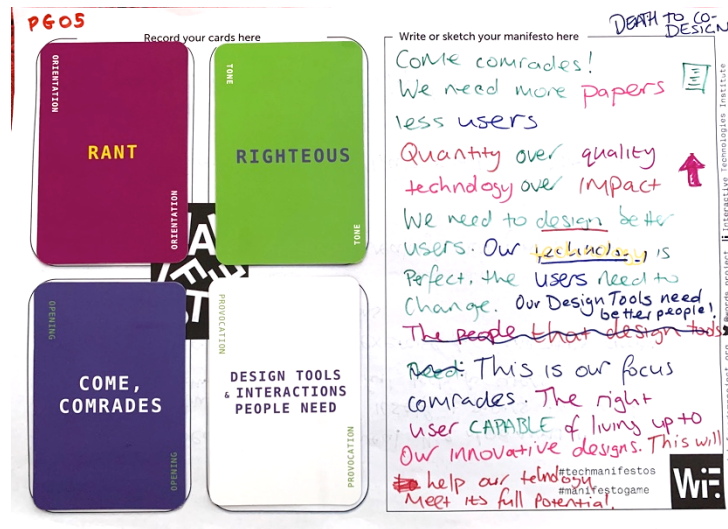


Figure 6: Group authored manifesto and corresponding game cards.

4.3 Survey

As stated above, we asked participants from both types of interaction to complete a brief paper-based survey (Table 2). In total we collected 16 surveys: eight from the guerrilla session and eight from the structured CHI session, where we collected just one survey per team. Note that the additional survey was the result of the group split described in Section 4.2.2.

Table 2: Survey questions.

- Q1 Do you think you expressed something important in your manifesto? Please elaborate.
- Q2 Would you write another manifesto? Why or why not?
- Q3 What would you most like to change about the CHI community / HCI discipline?
- Q4 Do politics belong in CHI? Please elaborate.

Q5 Did you subvert the rules of the game? If so, how?

In response to Q1, participants all affirmed having expressed something important in their manifesto. Some went further in suggesting they would be willing to be more active in carrying these ideas through in their professional roles. One respondent stated: 'I want to continuously engage communities and people and break out of our CHI elitist bubble. Tech should help people, reduce global negativity and should be accessible to all. Responsible and sustainable tech are in my heart, so is making the future more available to everyone.' For Q2, all participants stated that they would be willing to write another manifesto; one individual reported that manifesto writing is already something they do 'on a weekly basis to get my act together.' Others described the manifesto as 'empowering', 'more actionable and emotional', giving 'a different edge', and a welcome respite from 'academic blanchmange'. Responses to Q3 were wide-ranging and passionate, with participants making numerous suggestions for change within the HCI community. All respondents to Q4, apart from one, identified politics as an integral feature of the HCI discipline. In terms of subverting the rules of the game (Q5), most said they were content to play by the rules ('it works'), with a few suggesting minor alterations, e.g. co-directing, rather than choosing one director/leader. We return to these and other insights in the following section.

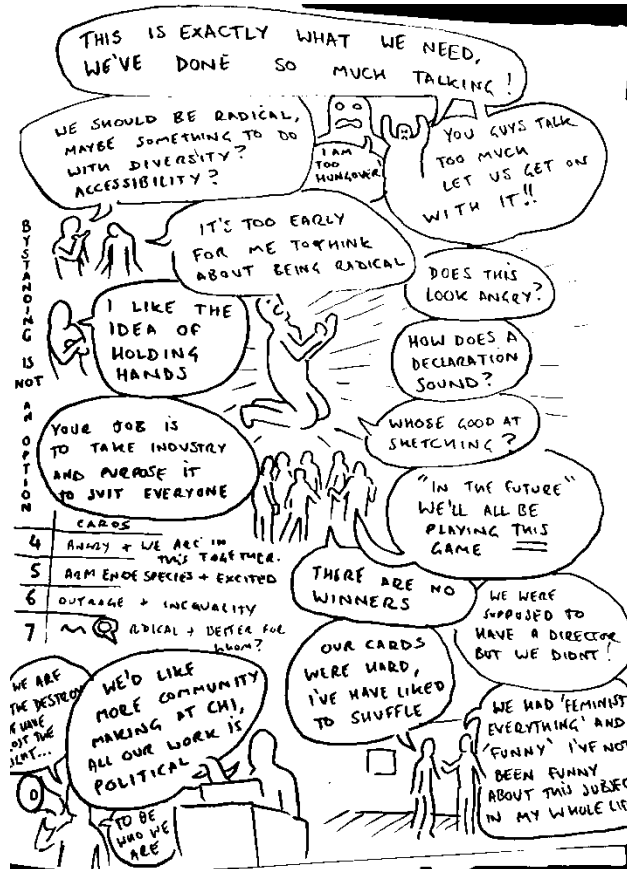


Figure 7: Notes from group interactions.

5 Discussion

5.1 The Manifesto Mask and Bodied Interaction

‘Man is least himself when he talks in his own person. Give him a mask, and he will tell you the truth.’
- Oscar Wilde, ‘The Critic as Artist’ (1891) [51]

‘The mask is a motif that appears frequently in the drama of the manifesto’ [26], enabling the author to speak more boldly than social norms would usually allow. In an academic context, the manifesto’s mask is useful as it lends the wearer symbolic authority (which they might not otherwise feel) and licence to express powerful emotions such as anger or outrage. We observed use of the mask across all of the individual and group artefacts we collected. In terms of the paper-based manifestos, participants used rhetorical and visual strategies that borrowed from and often directly referenced famous historical examples, such as *The Communist Manifesto* (e.g. ‘Stop the oppression of the user’) and the U.S. Declaration of Independence (e.g. ‘A Declaration of Non-Independence’). This was, in part, encouraged by the cards, especially the Opening (‘Come, Comrades’, ‘We declare’) and Tone cards (‘Outraged’, ‘Angry’), as well as the sample MANIFESTO! gamesheet (Figure 5). In the case of the structured CHI interaction, participants were also introduced to this theatrical style with our initial modelling of a manifesto using a megaphone.

Common rhetorical features appeared across the paper-based manifestos. Not surprisingly, all of the manifestos displayed a sustained elevated tone - whether apocalyptic (‘We are on the brink of extinction’), conspiratorial (‘Ban the use of secretive algorithms now!’), or militant (‘Fight fascism’). As mentioned above (Figure 6), one group adopted a playful, ironic stance, declaring ‘Death to co-design’ and ‘Quantity over quality’. Other hallmarks of the manifesto were present, including a list of tenets, use of violent and destructive verbs (‘challenge’, ‘attack’, ‘topple’, ‘break’), exhortations and appeals (‘Join us’ or ‘We request’ followed by a list, ‘Listen first’, ‘Be open’ ...), and broad declarations (‘Everyone is a guru’). In addition, we find the use of binaries and dichotomies (‘academic mask’ vs. ‘true’ self), semantic and syntactic shifts (‘In the past few years’ → ‘We must’), and bilingualism (Chinese-English). The manifestos employed a diverse cast of agents and actors: from users, to the HCI community and the ‘CHI-verse’, to corporations (including specific references to the CHI sponsors Facebook, Google, and Uber).

There were also numerous visual features shown in the paper-based manifestos. These included bright colours, colour-coding (e.g. for each demand), use of all caps for keywords and slogans, stick figures with speech bubbles, symbols (arrows, anarchy), user faces, stickers and other collage elements, and shorthand diagrams (the Earth, a classroom, institutional machinery). One manifesto used purely visual means to striking effect in conveying its simple revolutionary message: the ‘#CHI2019’ conference sign, used by attendees for taking selfies, burning with pink and blue flames, and a deck of MANIFESTO! cards reimagined as a box of matches.

Use of the manifesto ‘mask’ and other dramatic effects also featured prominently in the tableau vivant and performance components of the structured session. Aside from the megaphone, groups made props from chairs and computer devices. The tableaux vivants created archetypal, iconic poses and compositions (Figure 4). Several participants chose to stretch out on the floor, and generally showed a willingness to take their work into public spaces (the corridor) and perform without shyness in front of passersby.

This ‘bodied interaction’ proved to be an essential method not just for breaking the ice, building trust, and facilitating group bonding, but also for overcoming difficulties that may come with expressing ideas verbally. While the groups discussed their compositions in advance, the kinaesthetic activity, interactional effects, and fun involved in achieving their tableaux enabled them to communicate non-verbally through space and to physically embody the different experiences being conveyed. According to one participant (Figure 4, top-left): ‘The basic message of the tableau vivant was the accessibility of CHI (or HCI conference more generally). The chairs represent a barrier that people are struggling with in order to reach CHI – a barrier that is seen as not needing to be there. This year the small rooms and layout of the

convention centre made it difficult to reach some of the sessions for a lot of people. But, we were thinking also of other barriers, such as money, visas, time off work, etc. that prevent a lot of people from accessing the academic community in the same way as everyone else.’

Reminiscent of the ‘Dance Your PhD’ contest in its unexpected crossing of boundaries,⁵ the raw and largely unmediated nature of the tableau vivant lent it force and immediacy, while providing a strong foundation for the group writing exercise that followed. This is a unique and effective tool for stimulating discussion and energising groups around a task. Its recursive power carries this enthusiasm forward into subsequent tasks - in our case, the paper-based manifesto and final performance - and ensures full participation by all group members. We plan to use this method in our future engagements, including testing, and recommend that it be added to the canon of user research methods.

5.2 Implications for Gameplay

Through both interventions we gained useful insights about our new game, still in its first iteration, and wider insights of relevance to other types of interactions involving rule-based games or group work. Since the guerrilla sessions were individual and the structured interventions group-based, the former untimed and the latter timed, we were able to draw certain conclusions about these basic parameters. Surprisingly, neither time limitations nor individual vs. group authoring had a strong impact on the final product: the manifestos themselves showed similar results. The main differences were that (predictably) the untimed manifestos tended to be slightly longer and more detailed in execution, and the individual manifestos tended to be more personal or idiosyncratic in content as compared with consensus-based group manifestos.

Of more interest to us were the ‘creative subversions’ and deviations we witnessed, and tacitly encouraged, in all forms of gameplay. These actions fell broadly under two main themes: taking control, and making the game more democratic. In terms of the former, there were several instances where players took control of various aspects of gameplay to make the game more interesting or better suited to their needs. For both guerrilla and structured interactions, some players wanted to choose the cards reflecting issues they care about, which was reasonable. In terms of making the game more democratic, one team chose to give every member a chance to direct and lend their voice, from the tableau vivant to completing the survey. Another group chose not to have a director at all for the tableau vivant (Figure 7).

Creative subversion extended to our own interaction design and the planning of both interventions, where our intention was to disrupt conventional academic modes and facilitate discussions around institutional change. Our methods included: guerrilla canvassing, breaking free from the meeting room, and (mis)using spaces (e.g. an abandoned sponsor booth, an empty corridor) and objects (e.g. delivering a presentation through a megaphone). This spirit carried into gameplay, as participants felt permission to be angry and outspoken - which is rare in academic contexts. At the same time, we tried to maintain a ‘safe space’ for open discussion, keeping the mood light and playful through irony and theatricality. Ultimately, we encouraged creative subversion with the understanding that letting people break the rules can lead to new insights, for example, that players (and academics!) desire greater control over the ways in which they engage, and that some people prefer a more democratic process, even if it means an increase in organisational labour.

5.3 Implications for Fourth-Wave HCI

As shown in Figure 8, the three major themes that emerge when considering our data with respect to fourth-wave HCI were: using the manifesto as a tool for disrupting academic discourse, the role of politics in CHI and HCI (and technology generally), and expressions of a desire for change - spanning numerous issues (from corporate sponsorship, to digital privacy, inclusivity, challenging academic hegemony, etc.) - by members of the HCI community. If fourth-wave HCI is defined by a ‘primary focus on politics and values

⁵ <https://www.sciencemag.org/projects/dance-your-phd>

and ethics' [8], our findings both reinforce this definition and underline the desire for an even greater, more active engagement with real-world issues that goes beyond mere recognition or discussion into action and change. Moreover, as observed in the structured session at CHI (described above), people want agency in defining their community's values and practices. Numerous participants said they were glad to be given a voice in a community where they do not always feel empowered to speak, much less effect change. HCI needs a bold yet constructive and democratic intervention in the spirit of [32] and [31]; HCI needs the manifesto.

Disrupt academic discourse ...	Politics: elephant in the room ...	Desire for change ...	Creative subve leadership
Overheard: "This is exactly what we need. We've done so much talking."	P07-Q4: "Politics are already in CHI. This must be recognised by every author + every delegate."	P07-Q1: "Importance of critique, righteousness of challenging academic hegemony."	NOTE: PG01 us their manifesto gamesheet (me to walk away wi presumably dis group)
PG01-Q2: "to be agents of change; -> to give voice to those who can't be here; -> I find it empowering; -> Gives a different edge; -> more actionable+emotional."	P05-Q4: "Technology is political. Society is political. So is the socio-technical. If we don't confront it how can we change the values engrained in it."	PG02-Q3: "We want a code of practice that everyone should sign up to - emphasising generosity, industry, dignity."	PG01-Q5: "We give us all the c control the timi
P09-Q1: "You caught me at a moment of openness."	PG07-Q4: "Everything is politics."	P01-Q1: "I wish for a more 'fierce' response to digital privacy."	PG03-Q5: "We cards and adde
P05-Q2: "Great way to succinctly articulate a passion or set of ideals/values."	P02-Q4: "Explicitly, not hidden as a research outcome."	P08-Q3: "Uber & Facebook should not be sponsoring CHI."	PG05-Q5: "Not Possibly flippec
PG05-Q2: "a good mental exercise for generating creative thought and distilling opinions."	PG05-Q4: "Yes, they are already in CHI, we need to address them and highlight them."	P04-Q3: "Inclusion. CHI is limited to academia - include public."	PG07-Q5: "Co-
P07-Q2: "Manifestos are useful, concise, accessible & informative, different to academic blanchange."	PG01-Q4: "Politics are everywhere anyway - ignoring it doesn't change it. If educated people don't do politics only loud people will."	PG04b-Q1: "Encourage female participation in CHI research, raise awareness on gender and writing."	PG4b-Q5: "Spli (one group spli rather than ask provocation car approach to Fei
P08-Q2: "to explore what matters"	P06-Q4: "Academics influence policy makers, who are aligned to a certain ideology."	P05-Q1: "I want to continuously engage communities and people and break out of our CHI elitist bubble. Tech should help people, reduce global negativity and should be accessible to all. Responsible and sustainable tech are in my heart, so is making the future more available to everyone."	P09-Q5: "Picke provoked me."
P06-Q1: "[Manifesto writing] was more fun and more disconnected from what I normally do. I found some guidance to say something, to elaborate my thoughts on a topic	P08-Q1: "I think we have a duty to resist the dominant power and the struggle does not end with small		OVERHEARD: "" to have a direct

Figure 8: Extract from thematic analysis.

As the results of our activities at CHI'19 demonstrate, manifesto writing as an individual or group activity is a fun and effective way to start conversations about future change. At the same time, one possible criticism of manifesto writing is that it represents a merely superficial engagement with serious issues. Manifestos are short and sharp, often emotionally-driven, and they rely on slogans and other forms of eye-catching communication drawn from advertising to convey their messages [28]. Producing an image of a burning CHI sign is certainly engaging on some level, and it works on social media, but arguably it does not lead to deeper discussions; it is the equivalent of a one-line joke, a meme. On the other hand, social media can be an effective tool for galvanising real-world action [3], and the manifesto as a genre is ideally suited to online communication. Moreover, when an image of the 'burning CHI' manifesto was presented recently at another conference [36], it did contribute to a deeper discussion around accessibility, with some CHI attendees and protesters⁶ describing the events and issues raised at CHI'19 to others who had not attended. There were also examples in the completed manifestos of deeper questioning, serious criticism, and useful visions of the possible futures of CHI and HCI more broadly. Looking ahead to CHI'20, and even further ahead to CHI'30,⁷ there appears to be a growing desire to incorporate activism for positive change within the HCI community and to address larger political issues.

⁶ <https://twitter.com/jesskorte/status/1126088987108610048>

⁷ <http://chi2030.vision>

6 MANIFESTO! Futures

We are currently testing the cards, along with our existing suite of online tools,⁸ in secondary school and university classrooms in Europe. Improvements to the next iteration of MANIFESTO! include: providing two options per Provocation card (doubling the choice of themes); introducing variations to gameplay instructions, including the tableau vivant; and designing new editions (e.g. Future of Europe and Higher Education editions). We are also developing a digitised version of MANIFESTO! with classrooms and organisations in mind. This will allow the infinite expansion of prompts, accommodating multiple domains, while enabling agile experimentation with new variations, the ability to link to existing examples of online digital manifestos, and smoother integration of social media sharing.

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REFERENCES

- [1] Konstantin Aal, Anne Weibert, Reem Talhouk, Vasilis Vlachokyriakos, Karen Fisher, and Volker Wulf. 2018. Refugees & technology: determining the role of HCI research. In *Proceedings of the International Conference on Supporting Groupwork (GROUP '18)*. ACM Press, New York, NY, USA, 362-364. DOI: 10.1145/3148330.3152160
- [2] AIGA (American Institute of Graphic Arts). Design for good. Retrieved 23 May 2018 from <http://www.aiga.org/designfor-good>
- [3] Monica Anderson, Skye Toor, Lee Rainie, and Aaron Smith. Activism in the social media age. Pew Research Center. (July 11, 2018). Retrieved 16 June 2019 from <https://www.pewinternet.org/2018/07/11/activism-in-the-social-media-age/>
- [4] Mariam Asad. 2018. Prefigurative design as an alternative approach to civic engagement. In *Proceedings of the Conference on Computer Supported Cooperative Work & Social Computing (CSCW '18)*. ACM Press, New York, NY, USA, 97-100. DOI: 10.1145/3272973.3272983
- [5] Mariam Asad and Christopher A. Le Dantec. 2015. Illegitimate civic participation: supporting community activists on the ground. In *Proceedings of the Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15)*. ACM Press, New York, NY, USA, 1694-1703. DOI: 10.1145/2675133.2675156
- [6] Simone Ashby, Julian Hanna, Sónia Matos, and Ricardo Rodrigues. 2018. Collaborative narrative visions and the Manifesto Machine. In *Proceedings of the Conference on Computer Supported Cooperative Work & Social Computing (CSCW '18)*. ACM Press, New York, NY, USA, 13-16. DOI: 10.1145/3272973.3272999
- [7] Richard Barbrook. 2015. *Class Wargames: Ludic Subversion Against Spectacular Capitalism*. Minor Compositions, London, UK.
- [8] Eli Blevis, Kenny Chow, Ilpo Koskinen, Sharon Poggenpohl, and Christine Tsin. 2014. Billions of interaction designers. *interactions* 21, 6 (October 2014), 34-41. DOI: 10.1145/2674931
- [9] Susanne Bødker. 2015. Third wave HCI, 10 years later. *interactions* 22, 5 (September-October 2015), 24-31. DOI: 10.1145/2804405
- [10] Susanne Bødker. 2006. When second wave HCI meets third wave challenges. In *Proceedings of the 4th Nordic Conference on Human-Computer Interaction (NordiCHI '06)*. ACM Press, New York, NY, USA, 1-8. DOI: 10.1145/1182475.1182476
- [11] Harry Brignull and Yvonne Rogers. 2003. Enticing people to interact with large public displays in public spaces. In *Proceedings of the IFIP International Conference on Human-Computer Interaction (INTERACT '03)*. DOI: 10.1.1.129.603
- [12] Stuart Candy. The Thing From The Future. The Sceptical Futurist. (20 October 2015). Retrieved June 17, 2019 from <https://futuryst.blogspot.com/2015/10/the-thing-from-future.html>
- [13] Damian Carrington. 'Climate Apartheid': UN expert says human rights may not survive. The Guardian. (25 June 2019). Retrieved 25 June 2019 from <https://www.theguardian.com/>

⁸ <https://www.wordsinfreedomproject.org>

- [14] Mary Ann Caws. 2001. *Manifesto: A Century of Isms*. University of Nebraska Press, Lincoln, NE, USA.
- [15] Jim Dator. 2009. Alternative futures at the Manoa School. *Journal of Futures Studies*, 14, 2, 1-18.
- [16] Anthony Dunne. 2005. *Hertzian Tales* (rev. ed.). MIT Press, Cambridge, MA.
- [17] Anthony Dunne and Fiona Raby. 2013. *Speculative Everything: Design, Fiction and Social Dreaming*. MIT Press, Cambridge, MA.
- [18] Melanie Feinberg, Sarah Fox, Jean Hardy, Stephanie Steinhardt, and Palashi Vaghela. 2019. At the intersection of culture and method: designing feminist action. In *Proceedings of the Designing Interactive Systems Conference (DIS '19)*. ACM Press, New York, NY, USA, 365-368. DOI: 10.1145/3301019.3319993
- [19] FoAM (2015). A Futurist's Fieldguide. https://librarynth.org/futurist_fieldguide/start
- [20] Christopher Frauenberger, Judith Good, and Narcis Pares. 2016. Autism and technology: beyond assistance & intervention. In *Proceedings of the Conference on Human Factors in Computing Systems (CHI '16)*. ACM Press, New York, NY, USA, 3373-3378. DOI: 10.1145/2851581.2856494
- [21] Ester Fritsch, Irina Shklovski, and Rachel Douglas-Jones. 2018. Calling for a revolution: an analysis of IoT manifestos. In *Proceedings of the Conference on Human Factors in Computing Systems (CHI '18)*. ACM Press, New York, NY, USA, Paper No. 302. DOI: 10.1145/3173574.3173876
- [22] Anne C. Galloway, Jonah Brucker-Cohen, Lalya Gaye, Elizabeth Goodman, and Dan Hill. Design for hackability. 2004. In *Proceedings of the Designing Interactive Systems Conference (DIS '04)*. ACM Press, New York, NY, USA, 363-366. DOI: 10.1145/1013115.1013181
- [23] Andrew Goffey. 2008. Algorithm. In Matthew Fuller (Ed.) *Software Studies: A Lexicon*. MIT Press, Cambridge, MA, USA, 15-20.
- [24] Julian Hanna, Simone Ashby, Sónia Matos, Alexis Faria, and Ricardo Rodrigues. 2019. Dissent by design: a manifesto for CHI manifestos. In *Extended Abstracts of the Conference on Human Factors in Computing Systems (CHI '19)*. ACM Press, New York, NY, USA, Paper No. alt11. DOI: 10.1145/3290607.3310423
- [25] Julian Hanna. 2019. Future shock: manifestos in the digital age. *Hyperrhiz: New Media Cultures* 20. DOI: 10.20415/hyp/020.ex02
- [26] Julian Hanna. 2017. 'BLAST First (from politeness) ENGLAND': The manifesto in Britain and Ireland. *Modernist Cultures* 12, 2, 297-315. DOI: 10.3366/mod.2017.0172
- [27] Julian Hanna, James Auger, and Enrique Encinas. 2017. Reconstrained design: a manifesto. In *Proceedings of the Designing Interactive Systems Conference (DIS '17)*. ACM Press, New York, NY, USA, 177-181. DOI: 10.1145/3064857.3079141
- [28] Julian Hanna. 2014. Manifestos: a manifesto. *Atlantic* 24. (June 2014). Retrieved 4 June 2014 from <https://www.theatlantic.com/entertainment/archive/2014/06/manifestos-a-manifesto-the-10-things-all-manifestos-need/372135/>
- [29] Julian Hanna. 2009. *Key Concepts in Modernist Literature*. Palgrave Macmillan, Basingstoke, UK.
- [30] Harry Hochheiser and Jonathan Lazar. 2007. HCI and societal issues: a framework for engagement. *Int J of Human-Computer Interaction* 23, 3, 339-374.
- [31] Joichi Ito. 2017. Resisting reduction: a manifesto. Retrieved 15 June 2018 from <https://jods.mitpress.mit.edu/pub/resisting-reduction>
- [32] Bruno Latour. 2010. An attempt at a 'compositionist manifesto'. *New Literary History* 41, 471-490.
- [33] Conor Linehan and Ben Kirman. 2014. Never mind the bollocks, i wanna be anarCHI: a manifesto for punk HCI. In *Proceedings of the Conference on Human Factors in Computing Systems (CHI '14)*. ACM Press, New York, NY, USA, 741-748. DOI: 10.1145/2559206.2578880
- [34] Janet Lyon. 1999. *Manifestoes: Provocations of the Modern*. Cornell University Press, Ithaca, NY, USA.
- [35] Clara Mancini. 2011. Animal-computer interaction: a manifesto. *interactions* 18, 4, 69-73.
- [36] Sónia Matos, Simone Ashby, Julian Hanna, and Ricardo Rodrigues. 2019. Youth, politics and civic participation: the 'Manifesto Machine'. In *Proceedings of the 9th International Conference on Communities and Technologies*, ACM Press, New York, NY, USA, 5-8. DOI: 10.1145/3328320.3328374
- [37] Karl Marx and Friedrich Engels. 2002. *The Communist Manifesto*. Penguin, London, UK.
- [38] Jane McGonigal. 2010. Gaming can make a better world. Video. (17 March 2010). Retrieved 26 June 2019 from <https://www.ted.com/talks/>

- [39] Marianna Obrist, Patrizia Marti, Carlos Velasco, Yunwen (Tutu) Tu, Takuji Narumi, and Naja L. Holten Møller. 2018. The future of computing and food. In *Proceedings of the International Conference on Advanced Visual Interfaces (AVI '18)*. ACM Press, New York, NY, USA, Paper No. 5. DOI: 10.1145/3206505.3206605
- [40] Marjorie Perloff. 2003. *The Futurist Moment*. University of Chicago Press, Chicago, IL, USA.
- [41] Mary Pilon and Samuel Granados. 2015. The roots of Monopoly: how a left-wing game became a popular symbol of capitalism. Washington Post. Retrieved 12 June 2019 from <http://www.washingtonpost.com/graphics/lifestyle/magazine/monopoly/>
- [42] Sebastian Prost, Johann Schrammel, and Manfred Tscheligi. 2014. 'Sometimes it's the weather's fault': sustainable HCI & political activism. In *Proceedings of the Conference on Human Factors in Computing Systems (CHI EA '14)*. ACM Press, New York, NY, USA, 2005-2010. DOI: 10.1145/2559206.2581358
- [43] Martin Puchner. 2000. Screeching voices: avant-garde: manifestos in the cabaret. *European Avant-Garde: New Perspectives*. Dietrich Scheunemann (Ed.). Rodopi, Amsterdam, Netherlands, 113-35.
- [44] Jacques Rancière. 2010. *Dissensus: On Politics and Aesthetics*. Continuum, London, UK.
- [45] Dries de Roeck, Karin Slegers, Johan Criel, Marc Godon, Laurence Claeys, Katriina Kilpi, and An Jacobs. I would DiYSE for it!: a manifesto for do-it-yourself internet-of-things creation. In *Proceedings of the 7th Nordic Conference on Human-Computer Interaction (NordiCHI '12)*. ACM Press, New York, NY, USA, 170-79. DOI: 10.1145/2399016.2399018
- [46] Angelika Strohmayer, Rosanna Bellini, Janis Meissner, Samantha Mitchell Finnigan, Ebtisam Alabdulqader, Austin Toombs, and Madeline Balaam. 2018. #CHIiversity: implications for equality, diversity, and inclusion campaigns. In *Proceedings of the Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM Press, New York, NY, USA, Paper No. alt03. DOI: 10.1145/3170427.3188396
- [47] Reem Talhouk, Kellie Morrissey, Sarah Fox, Nadia Pantidi, Emma Simpson, Lydia Emma Michie, and Madeline Balaam. 2018. Human computer interaction & health activism. In Extended Abstracts of the 2018 CHI Conference on Human Factors in *Proceedings of the Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM Press, New York, NY, USA, Paper No. SIG15. DOI: 10.1145/3170427.3185369
- [48] Cameron Tonkinwise. 2015. Just design: being dogmatic about defining speculative critical design future fiction. Medium. (5 October 2015). Retrieved 16 June 2019 from <https://www.cryptoludology.com/?p=147>
- [49] Vasilis Vlachokyriakos, Rob Comber, Karim Ladha, Nick Taylor, Paul Dunphy, Patrick McCorry, and Patrick Olivier. 2014. PosterVote: expanding the action repertoire for local political activism. In *Proceedings of the Conference on Designing Interactive Systems (DIS '14)*. ACM Press, New York, NY, USA, 795-804. DOI: 10.1145/2598510.2598523
- [50] David I. Waddington. 2013. A parallel world for the World Bank: a case study of Urgent: Evoke, an educational alternate reality game. *Revue Internationale Des Technologies En Pédagogie Universitaire (International Journal of Technologies in Higher Education)* 10, 3, 42-56.
- [51] Oscar Wilde. 1982. *The Artist as Critic: The Critical Writings of Oscar Wilde*. University of Chicago Press, Chicago, IL, USA.
- [52] Felix Wong. 2016. That day we left: a somber look at the Syrian refugee crisis. Cliqist. (2 August 2016). Retrieved 18 June 2019 from <http://cliqist.com/2016/08/02/day-left-syrian-refugee-crisis/>